



California Regional Water Quality Control Board Central Valley Region

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DATE: 22 September 2009

2008 ANNUAL MONITORING REPORT REVIEW- OAKDALE IRRIGATION DISTRICT

Staff of the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) reviewed the Annual Monitoring Report (AMR) for the Oakdale Irrigation District (District) dated 27 February 2009. The Central Valley Water Board received this report on 27 February 2009. The District submitted this report to meet the conditions of the Monitoring and Reporting Program (MRP) Order No. R5-2003-0827 for Individual Dischargers under Resolution No. R5-2003-0105 and the associated Individual Discharger Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Individual Waiver) Order No. R5-2006-0054.

Central Valley Water Board staff reviewed the AMR to evaluate it for the required reporting conditions described in the Order and in the District's MRP Plan. In this memorandum, staff presents their comments and recommendations pursuant to the Order and MRP Plan. The review is divided into sections. The section titles are the same as the titles used in the attached AMR Checklist.

ADMINISTRATIVE AND COMPLIANCE ASPECTS

Item 1, 2, 3: Signed Transmittal Letter, Title Page, Table of Contents

The AMR included these required components described in the Order except the sections summarizing precision and accuracy and assessment of data quality objectives in the Table of Contents. Item 13 provides more detail for the summaries. Staff recommends that the section names in future reports match those found in the MRP section III.C. Annual Monitoring Report components.

Item 4: Executive Summary

Although the Executive Summary is not a required component of the AMR, it is general practice that the Executive Summary briefly summarizes the activities, results, and conclusions and recommendations. The District could also briefly note when and where sampling did not take place. The current Executive Summary describes the land use conditions.

Item 7: Sampling Site Descriptions

Pages 5 and 6 of the AMR indicate that Surflan (oryzalin) was monitored at all three sites during the reporting period. However, the Pesticide Use Report did not report any applications of this herbicide. The Pesticide Use Reports did indicate that Diuron 4L was applied, but the text in this section did not indicate monitoring for diuron among the other listed pesticides. Staff noted that diuron applications coincided with the storm season only and storm season monitoring was not triggered due to dry conditions. See Item 14 for information regarding diuron applications (Table1).

Item 12: Associated Laboratory and Field Quality Control Samples Results

Laboratory quality control presented a sufficient number of matrix spikes (MS), matrix spike duplicates (MSD), method blanks, laboratory control spike (LCS), laboratory control duplicate (LCSD), and surrogates. Although some of the MS/MSD results were above the upper acceptance limit, there were no detectable levels of the analyte in the samples. Consequently the data were accepted.

Item 13: Summary of Precision and Accuracy

Section 3.4.1 tabulates target reporting limits. This section should also include a summary of precision and accuracy as measured through the laboratory quality control data. The summary is a required component of the AMR. Staff reviewed the laboratory findings and concluded the monitoring results met the 90% confidence level. The QC should be summarized in tabular format like the monitoring data to meet the conditions of the MRP Order. Some of the MS/MSD and LCS/LCSD did not meet acceptance criteria and these occurrences should have been summarized in the report as part of the District's summary of precision and accuracy. However, since the results indicated non detect the data was accepted.

To accompany the QC tabulation, the District should identify acceptance criteria for all measurements of precision and accuracy by:

- Identifying any QA/QC results that did not meet acceptance criteria and discuss corrective actions rather than directing the reader to the laboratory report
- Calculate and report completeness, precision, and accuracy by calculating the percentage of QC data that met acceptance criteria
- Document and discuss any adjustments made to acceptance criteria (if any)

ANALYTICAL ASPECTS**Item 14: Pesticide Use Reports**

Staff prepared Table 1 below using the Pesticide Use Reports. It reports the pesticide, month of application, and the month when the sample event occurred. The District did not have a qualifying storm event during the period of November 2008 through April 2009. Consequently, the District was not able to conduct a storm event due to dry conditions. The District provided site photos of the irrigation season, but must also include rainfall records and site photos of the dry conditions.

The District should consider that if its monitoring is intended to represent the District's applications of chemicals, the current sampling schedule could be more representative of potential runoff if the sampling schedule was more closely coordinated with the applications (see Table 1 below). Staff recognizes that the sampling schedule described in the MRP Plan

was originally designed to be representative of high flow during June/July and low flow during September/October. According to the sampling data presented in the AMR, no exceedances were observed.

Table 1. OI D Pesticide Applications During 2008 According to PURs

Trade Name	Active Ingredient	Month Applied											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Round-up Pro Concentrate	Glyphosate	x	x	x	x	x	x	x	x	x	x	x	x
Diuron 4L	Diuron	x	x	x	x								
Weedestroy AM 40	2, 4-D				x	x							
Milestone	Aminopyralid							x	x				x
Garlon 4	Triclopyr, Butoxyethyl ester									x	x		
Demon WP	Cypermethrin											x	x
Pendulum	Pendimethalin												x
Surflan AS	Oryzalin												

x = Month of pesticide application

Shade=month of sample event

Item 16: Summary of Management Practices Used by the District

The District did not observe any pesticide exceedances for the chemicals it applied during the sampling events or any field parameter exceedances. As part of the management practices, the District reported that it followed the pesticide label instructions, obtained the required permits, and filed its annual Notice of Intent with the California Department of Fish and Game.

Item 19: Conclusions and Recommendations

The AMR provides sufficient information throughout the text to assess the degree to which the MRP objectives were achieved. This section could benefit by consolidating and summarizing those findings and presenting them in the Conclusions and Recommendations section.